

**ROSE BUD SAWFLY, *MONARDIS PLANA* (KLUG)
(HYMENOPTERA: TENTHRIDINIDAE), NEW TO BRITAIN,
DISCOVERED IN SOUTH WALES**

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ABSTRACT

Monardis plana (Klug, 1817) belongs to a sawfly genus new to the British list. Its identification is discussed and the male penis valve and female sawsheath illustrated.

INTRODUCTION

On the 16 April 2003 the extensive dune system at Merthyr-mawr Glamorgan, South Wales was visited. Along the northern fringe of the dunes, where sand covers the adjacent low hills, a pair of small black sawflies was swept from an area dominated by Burnet Rose *Rosa spinosissima* L. (= *pimpinellifolia* L.). When it came to naming them using Benson (1952) they could be readily placed in the sub-family Blennocampinae, tribe Blennocampini but would not key cleanly to genus. The specimens were taken to the BENHS rooms at Dinton Pastures where some continental keys were available. Using Berland (1947) the specimens appeared to key to *Monardis plana* (Klug), a genus and species not previously recorded in Britain.

The specimens were then passed on to David Sheppard who was able to confirm the genus using the key of Zombori (1982) to the European genera of Blennocampinae and in the keys of Zhelochovtsev (1994) to the sawflies of European Russia. There is only one western European species of *Monardis*, namely *M. plana* Klug, 1817, also known as the Rose-bud sawfly. The tarsal claw, mandibular space and antennal segment characters and, most particularly, the shape of the sawsheath confirmed this conclusion.

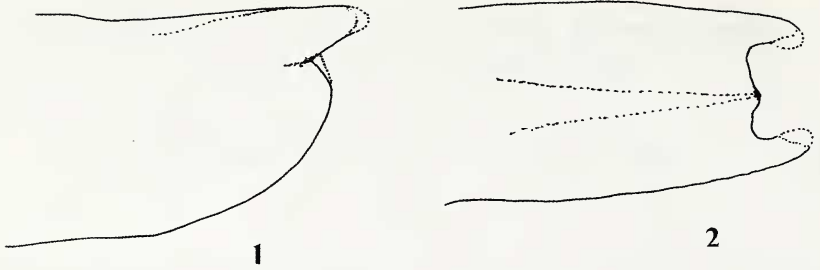
IDENTIFICATION

Using Benson's key to the tribe Blennocampini (1952) the specimens run to couplet 13 fairly straightforwardly but do not fit either alternative. *Monardis plana* is 6–7 mm long, has vein 2r of the forewing joining Rs approximately its own length from vein 2m, the stub of vein 3A straight but with a vague upturned continuation, and the second antennal segment as long as broad. Thus it most closely resembles *Cladardis*, a genus only uncertainly recorded in Britain (Benson, 1952). However, female *Monardis* are immediately distinguishable from *Cladardis* by the robust, blunt spines on the dorsal tip of the sawsheath (Figs 1 & 2).

The only British species possessing spines on the sawsheath is *Ardis pallipes* (Serville, 1823) (= *brunniventris* Hartig, 1834), also associated with *Rosa*. However, this species is readily identified by a series of deep pits immediately behind the eyes (see Benson, 1952, fig. 292). Although the sawsheath of *Ardis* is similar when viewed dorsally, it is quite different in lateral aspect (see Benson, 1952, fig. 288) (A. Liston, pers. comm.).

BIOLOGY

Monardis plana is a single brooded species, adults appearing in early spring (Scheibelreiter, 1973). Oviposition takes place as the leaf buds are opening, the eggs



Figs. 1–2. Sawsheath 1. left lateral 2. dorsal.

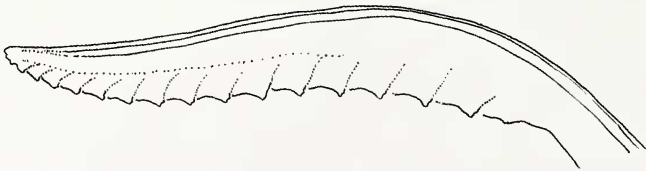


Fig. 3. Ovipositor (saw) right lateral.

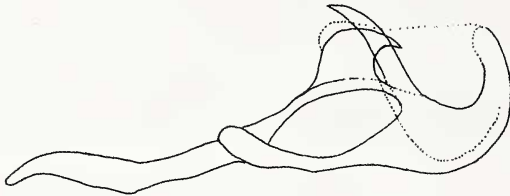


Fig. 4. Penis valve.

laid between the upper- and underside of the serrate margins of the leaflets. These often lie so close together, that the impression of a single egg pocket is given. The egg and pocket is pale so easily seen in May. The young larvae emerge at the beginning of May and initially live between folded unopened leaflets, feeding in groups and hollowing out the buds. When the leaflets spread and open, they show small holes with brown margins. The larvae bore holes up to 1–1.5cm length into the flower stalks and soft parts of the apical shoots. Older larvae chew irregular holes in the young leaves, in some cases damaging up to 100% of the buds and young leaves. Larval development takes from three to three-and-a-half weeks. The cocoon is formed near the soil surface not far from the hostplant (Scheibelreiter, 1973; Viitasaari, 2002). A description of the larva can be found in Lorenz & Kraus (1957).

In semi-natural situations *M. plana* larvae were found only in small numbers on the wild roses *R. multiflora* Thunb., *R. canina* L., *R. dumetorum* Thuill. amongst others. Conversely, cultivated roses (particularly polyantha roses) in public parks and graveyards were often heavily attacked (Scheibelreiter, 1973). In Finland the species has been recorded feeding on *Rosa pimpinellifolia* (Kontuniemi, 1960).

At Merthyr-mawr, the specimens were found in abundance associated with *Rosa spinosissima* (= *pimpinellifolia*), a species mainly restricted to coastal habitats in the UK (Graham & Primavesi, 1993). In the dull conditions that prevailed they could be found clinging motionless to the undersides of thin twigs of *Rosa*, readily dropping to the ground if disturbed. A few females were observed ovipositing close to the tips of some twigs. Given the food plant preferences of this sawfly on the continent, it is surprising that this species has not been reported from cultivated roses before being found in the wild.

DISTRIBUTION

Monardis plana is known from much of northern and western Europe so it is no surprise that it occurs in Britain. In Europe there are records from Austria, Belgium, Bosnia and Herzegovina, Czech Republic, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Macedonia, Romania, Russia, Slovakia, Spain, Switzerland and The Netherlands (www.faunaeur.org/).

MATERIAL EXAMINED

BRITAIN, South Wales, Glamorgan VC41 Merthyr-mawr SS8677 16.iv.2003
1♀1♂.

BRITAIN, South Wales, Glamorgan VC41 Merthyr-mawr SS8677 16.iv.2005
15♀2♂.

DISCUSSION

It is interesting to note that Cameron (1882) possibly introduced this species to the British list under the name *Blennocampa sericans* Hartig, 1837, a junior synonym of *M. plana* Klug, 1817. Benson (1952: 103) treated this record as a misidentification of *Cladardis elongatula* (Klug, 1817). The description by Cameron (1882) does resemble *C. elongatula* and not *M. plana* Klug, 1817. The single record of *Cladardis elongatula* from 'York' does not seem to be supported by any extant specimens so this problem cannot be resolved.

ACKNOWLEDGEMENTS

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REFERENCES

- Benson, R.B. 1952. Hymenoptera 2. Symphyta, Tenthredinidae (section b). *Handbooks for the Identification of British Insects* 62(b): 51–137.
- Berland, L. 1947. Hyménoptères Tenthredoides. – *Faune de France* 47: 1-493.
- Cameron, P. 1882. *A Monograph of the British Phytophagous Hymenoptera. (Tenthredo, Sirex and Cynips, Linné.)* – London 1: 1–340 plus 21 plates.
- Graham, G.G. & Primavesi, A.L. 1993. *Roses of Great Britain & Ireland*. BSBI Handbook No.7. Botanical Society of the British Isles, London.
- Kontuniemi, T. 1960. Suomen sahapistiäistoukkien ravintokasvit. Die Futterpflanzen der Sägewespenlarven (Hymenoptera, Symphyta) Finnlands. *Animalia Fennica* 9: 1–104.

- Lorenz, H. & Kraus, M. 1957. Die Larvalsystematik der Blattwespen (Tenthredinoidea und Megalodontoidea). *Abh. Larvalsystem. Insekten* 1: 1–389.
- Scheibelreiter, G.K. 1973. Die Tenthrediniden der Rose (*Rosa spec.*). – *Z. angew. Ent.* 72: 225–259.
- Viitasaari, M. 2002. The Suborder Symphyta of the Hymenoptera. In: Viitasaari, M.; (Hrsg.) 2002: Sawflies (Hymenoptera, Symphyta) I. A review of the suborder, the Western Palaearctic taxa of Xyeloidea and Pamphilioidea. *Tremex* 1: 11–174.
- Zhelochovtsev, A.N. 1994. 27. Order Hymenoptera. Suborder Symphyta (Chalastogastra) In: Medvedev, G.S. (Hrsg.): *Keys to the Insects of the European Part of the U.S.S.R.* Amerind Publ. Co. Pul. Ltd., New Delhi 3: 1–387.
- Zombori, L. 1982. The European genera of Blennocampinae (Hymenoptera: Symphyta, Tenthredinidae). *Acta Zoologica Academiae Scientiarum Hungaricae* 28: 183–192.

ANNOUNCEMENT

The National Macro-moth Recording Scheme

Butterfly Conservation is delighted to announce that, after several years of careful planning and hard work, the bid to the Heritage Lottery Fund for funding for the National Macro-moth Recording Scheme has been successful. The award is for £806,000. This funding will cover the initial four years of the scheme, though we intend the scheme to run beyond this.

Many of you will be aware of the higher profile ‘Planning Phase’ of the project, which took place during 2003 and 2004, with articles appearing in several journals subsequently—we would like to take this opportunity to thank all of you who contributed and supported this part of the process. We would also like to thank the many organizations* and individuals who have offered matched funding for the scheme itself, this was an essential requirement for the Heritage Lottery Fund and helped us demonstrate wide support for the project at both local and national levels. Fundraising is not quite complete and efforts will continue to try to raise the additional costs required.

At the time of writing there were still many contractual details to sort out with the Heritage Lottery Fund and a precise timetable for the project had not been formulated in detail. However, it is hoped that a Project Manager will be in post by the end of summer/early autumn 2006 and that the scheme will start in earnest at around this time. We will keep you informed of further developments (see also website www.mothrecording.org.uk).

This is very much a partnership project with Butterfly Conservation taking the lead. A Steering Group will be formed and will have representatives from a range of organisations, including, hopefully, the British Entomological & Natural History Society, the governmental conservation organisations, at least one County Recorder and a representative from a local moth group (although this could be the same person).

This is a very exciting development for the recording of moths and moth conservation:—we look forward to working with you and hope you can all contribute to making this project a success.—MARK PARSONS, Butterfly Conservation, Manor Yard, East Lulworth, Wareham, Dorset BH20 5QP.

*This includes the British Entomological & Natural History Society.